



UNITED STATES DEPARTMENT OF COMMERCE
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STATEMENT BY

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COMMITTEE ON SCIENCE
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Madame Chairwoman and Members of the Committee, I am pleased to appear before you today to discuss the Office of Inspector General's recent audit and inspection work at the Technology Administration's Office of Technology Policy, National Institute of Standards and Technology, and National Technical Information Service. When I appeared before the Committee last year, my remarks focused on our work related to NIST's Capital Improvements Facilities Program, its Advanced Technology Program, and NTIS's efforts to achieve financial stability. Today I will provide you with a brief update on our work related to these topics, as well as highlight some of the work we have completed or begun since last year.

NIST FACILITIES

In my testimony last year, I discussed the findings and recommendations from four separate reports issued by our office during fiscal years 1995 through 1997 on various aspects of the Capital Improvements Facilities Program (CIFP)—NIST's then \$540 million plan for renovating its existing laboratory and office space, as well as constructing new facilities, at its Gaithersburg, Maryland, and Boulder, Colorado, sites over the 10-year period 1993-2002. The CIFP included plans for a mix of new construction and renovation of existing facilities.

In general, we found that most of NIST's plans for renovating existing laboratory space were justified and necessary if the agency is to continue its mission into the future. We concluded that NIST had done a good job of examining its facility deficiencies and translating its needs into specific plans for remedying those deficiencies and producing energy-related savings and improvements in productivity and performance. We have consistently supported critical safety, health, and capacity expenditures at the Gaithersburg and Boulder sites. In addition, we endorsed NIST's plan to construct an Advanced Chemical Sciences Laboratory (ACSL) in Gaithersburg.

We also confirmed NIST's need to construct an advanced measurements laboratory (AML) in Gaithersburg, although we expressed concern about its plans to construct the building in phases because it did not believe that advance funding for unified construction would be available. We concluded that phased construction of the AML would greatly reduce efficiency and involve other costly disadvantages. NIST, the Department, and OMB agreed with our recommendation, and NIST is accumulating funds to allow unified construction of this \$218 million facility to begin in fiscal year 2000.

However, in our various reviews of the program, we took exception to some of NIST's construction plans, including its plan to construct a second, \$92 million AML in Boulder, its justification for leasing office space in Gaithersburg as "swing space" while some of its buildings were being renovated, and its handling of prior-year construction-related appropriations. I testified at some length last year about our reports and oversight efforts related to this program.

I am pleased to report that cooperation and communication between NIST, our office, and the Department concerning NIST's facilities plans have improved markedly since we initially began our work. The Department also has increased its oversight of these plans and has taken a more active role in evaluating facilities-related budget requests to ensure that they are reasonable and justified. NIST also has taken steps to ensure that both the Department and my office are "in the loop" as its plans evolve and has accepted our input constructively.

I recently toured the Boulder complex and met with managers and scientists to discuss their programs and facility issues. While we continue to question some of its long-term construction plans for the Boulder site, I was impressed with the quality of NIST's efforts to ensure that its existing facilities are properly maintained so that they remain safe and capable of supporting its highly specialized scientific programs.

In 1998, NIST submitted to the Congress a new long-term plan for meeting its facilities construction, renovation, and maintenance needs. The plan, which totals more than \$926 million, includes a discussion of the agency's short- and long-term facilities management goals; a six-year, \$333.6 million spending plan for fiscal years 1998 through 2003; and a list of approximately \$593 million in "potential projects" to be completed beyond the six-year time frame of the spending plan. Facilities-related expenditures planned through fiscal year 2003 include \$218 million for construction of the Gaithersburg AML and \$115.6 for safety, maintenance and other facility improvement projects related to failing or inadequate infrastructure. In addition, NIST believes that it will eventually need \$50 million in FY 1999 constant dollars annually for safety and maintenance in the long-term in order to adequately maintain its facilities. Clearly, NIST is estimating that significant funds will have to be spent on its facilities now and into the future in order to sustain its research capacities.

The addition of the ACSL—which is due to be occupied beginning later this month—the Gaithersburg AML, the currently leased building in Gaithersburg, and the vacant NOAA space to be occupied in Boulder will give NIST significantly more space than it had just a few years ago. NIST's new construction, plus its plan to renovate most of its current laboratory space, provides increased capacity to conduct research, but represents a significant investment for the Department. Given the potential magnitude of these expenditures and increases in space and capacity, it is essential that OIG, NIST, and Department officials continue to scrutinize these plans to ensure that all construction, renovation, and maintenance costs are fully justified. While we recognize that maintaining NIST's facilities and capacity will require a significant investment of funds, it is crucial that we, along with Commerce officials, continue to challenge NIST to justify its proposed facilities expenditures and space increases.

NIST FINANCIAL ASSISTANCE PROGRAMS

Discretionary financial assistance programs involve a significant portion of the Department's budget and operations. Six Commerce agencies administer about 70 financial assistance programs providing more than a billion dollars a year to state and local governments, educational institutions, nonprofit and for-profit organizations, and individuals.

In fiscal year 1998, NIST made 508 awards representing more than \$265 million in financial assistance under five programs:

- ! **The Advanced Technology Program (ATP)**, which assists U.S. businesses in creating and applying the generic technology and research results necessary to commercialize significant new scientific discoveries rapidly and to refine manufacturing technologies.
- ! **The Manufacturing Extension Partnership (MEP) Program**, which assists U.S. manufacturers in enhancing their productivity and technology performance.
- ! **The State Technology Extension Program**, which provides financial assistance to state governments and non-profit organizations to enable them to assist U.S. businesses in enhancing their competitiveness through the application of science and technology.
- ! **The National Standard Reference Data System Program**, which makes evaluated scientific and technical data readily available to scientists, engineers, and the general public.
- ! **The Measurement and Engineering Research and Standards Program**, which provides financial assistance to further scientific research in the areas of fire research, building research, precision measurement, automated manufacturing, advanced ceramics, and other research areas.

We recently completed individual audits of the application solicitation, review, and selection processes of each of NIST's financial assistance programs. These audits were conducted as part of a broad-based review of the Department's financial assistance programs initiated at the request of the Chairman of the Senate Commerce, Science, and Transportation Committee. The Chairman requested that the Inspectors General of the Departments of Commerce and Transportation and the National Science Foundation review the discretionary funding programs of their respective agencies to assess the manner in which funding decisions are made. We will be issuing draft reports to NIST for review and comment within the next few weeks.

Our audits found that most of NIST's programs have developed and are using appropriate merit-based criteria and competitive procedures in selecting applications for funding. Where merit-based criteria and/or competitive procedures were lacking, however, we are offering recommendations to correct these deficiencies.

According to NIST, ATP—NIST's largest and most visible financial assistance program—has grown from 11 awards representing 35 companies and \$98 million in federal and non-federal matching funds in fiscal year 1991 to a cumulative total of more than 400 awards representing over 1,000 companies and about \$2.8 billion through fiscal year 1998. We have provided oversight, advice, and assistance to NIST since the program's inception to better ensure that these funds and awards are properly administered.

In fiscal year 1998, we issued 29 financial-related audit reports on first-time recipients of financial assistance awards under the ATP and MEP programs. Twelve of the reports were on ATP award recipients, and the other 17 were on MEP program award recipients. Financial-related audits include accounting system surveys and interim and final cost audits. Accounting system surveys and interim cost audits are part of our pro-active work intended to prevent future problems of noncompliance with the terms and conditions of NIST cooperative agreements. Final cost audits provide information to enable NIST to close out agreements in a timely fashion.

Our ATP financial-related audit reports included seven accounting system surveys and interim cost audits, and five final cost audits of specific cooperative agreements. In all but one case, the surveys and audits disclosed only minor costs questioned and adequate compliance with NIST financial requirements. One final closeout audit of an ATP cooperative agreement that had a total estimated federal share of nearly \$2 million led us to recommend that NIST disallow about \$103,000 in questioned costs and de-obligate about \$1.4 million of unexpended funds under the award.

Consistent with our emphasis on pro-active efforts to help prevent or minimize potential problems with individual projects, all of our MEP program financial audit reports were accounting system surveys. The projects had award periods of two to three years, total estimated costs exceeding \$66.3 million, and federal shares that could ultimately be as much as \$32.3 million. Thirteen of the surveys identified weaknesses in the recipients' financial management and accounting systems—most commonly the failure to supply or document matching share funds, to properly claim and document allowable costs, and to implement adequate administrative policies and procedures.

We also have begun two performance audits of various aspects of NIST's administration of ATP. The first will evaluate NIST's use of ATP appropriations for intramural projects. The ATP statute authorizes NIST to use up to 10 percent of its ATP appropriations for standards development and technical activities. Since fiscal year 1996, approximately \$36 million in appropriations has reportedly been used to fund more than 300 intramural projects.

Our second performance audit will evaluate (1) the process and criteria used by NIST to generate and develop ideas for its ATP focused competitions and determine which ones to fund, and (2) the extent to which past focused competition selections met established selection criteria. NIST decided not to conduct any focused competitions in fiscal year 1999. Since the agency has not ruled out their possible use in future years, however, we are proceeding with our audit.

YEAR 2000 COMPUTER PROBLEM

Like other Commerce operating units and agencies throughout the federal government, both NIST and NTIS are faced with repairing their systems to make them Y2K-compliant, that is, capable of accurately processing year data associated with the century change. We are working closely with Commerce's new Chief Information Officer (CIO) and the operating units to ensure that the Department's mission-critical systems are converted by March 1999, the government-wide implementation date established by OMB.

In 1997 we provided feedback to the Department about improvements needed in the management of its Y2K program. More recently, we conducted a review to determine whether systems reported to OMB to be compliant actually were. We evaluated a small sample of systems reported to be compliant (14 systems) and found that 3 were not. We also found that critical systems were not properly identified and that systems were not being validated for compliance. Commerce's CIO has recognized these problems and instituted plans to resolve them. We recommended that operating units focus resources on their most important, high-risk systems, and that the CIO closely monitor their progress. We also recommended that operating units follow the CIO's directive to provide test documentation for compliant systems, to have compliance validated, and to have operating unit heads certify system compliance. Operating units are starting to respond to both the CIO's new plan and our recommendations.

With regard to the Technology Administration's Y2K program, NIST recently reported to the Department that 107 of its 109 mission-critical systems are Y2K-compliant. The conversion of the two remaining systems is scheduled to be completed by the end of March. NTIS's situation, however, is not so bright. NTIS recently identified six new mission-critical systems, raising the number of non-compliant systems to 10. The agency expects to repair eight of the systems and replace the remaining two. The Department's CIO has stated that he is very concerned that NTIS will not be able to repair its systems by OMB's March 1999 deadline. To mitigate this risk, he has arranged to closely monitor NTIS's progress with weekly status meetings. We agree with the CIO's assessment and strongly encourage his continued oversight. For our part, we will continue

to monitor the progress of the Technology Administration's Y2K program and provide timely feedback concerning any deficiencies noted.

RESULTS ACT IMPLEMENTATION

The Technology Administration, along with other operating units of the Commerce Department and other agencies throughout the federal government, faces many inherent challenges in determining how to best plan and measure its performance in accordance with the Government Performance and Results Act of 1993. The Department's draft strategic plan, which covered the five-year period from fiscal years 1997 through 2002, drew criticism from the General Accounting Office, the Congress, and other stakeholders. The draft plan was substantially revised to address these criticisms before it was submitted to OMB and the Congress in September 1997.

The Department's first Annual Performance Plan in support of its strategic plan was submitted to OMB and the Congress in February 1998. The FY 1999 plan was criticized for providing an incomplete picture of intended performance across the Department and not adequately demonstrating that the data to be used in measuring performance would be accurate, complete, and credible. GAO and the OIG also reviewed the plan and had similar concerns.

The Department submitted its second annual plan, for FY 2000, to OMB and the Congress on February 1, 1999. While the FY 2000 plan represents a significant improvement over the FY 1999 plan, the challenge for Commerce is to continue its efforts to improve its strategic planning and performance measurement by ensuring that its annual plans (1) present a complete picture of intended performance across the Department, (2) clearly articulate the strategies and resources to be applied in achieving the stated performance goals, and (3) provide assurance that the data to be used to measure performance will be accurate, complete, and credible. Senior Commerce officials should continue to make this effort a priority.

Based on our review of the agencies' overviews to their fiscal year 1998 financial statements, we have made a number of observations regarding the performance measurement and reporting

efforts of the Technology Administration:

- ! The Office of Technology Policy (US/OTP) should continue to refine its performance measurement and reporting. The office coordinates federal and state policy efforts to support a national approach to science and technology policy. While US/OTP is considering using the results of customer surveys and the number of web site accesses to measure performance, in the fiscal year 1998 overview to its financial statements, its discussion of results is limited to the number of reports issued and a brief discussion of accomplishments.
- ! NIST continues to make improvements in its performance measurement and reporting. However, measuring the results of investments in science and technology poses a particularly difficult challenge. To address this challenge, NIST has established an integrated planning and performance evaluation system to accommodate its diverse activities. The agency evaluates its performance through customer feedback, external assessment, economic impact studies, and quantitative tracking. This approach recognizes that no single metric or measurement method can capture the diversity and complexity of NIST's outputs and outcomes. By using diverse sources of performance data, NIST hopes to be able to better evaluate its products, services, and processes. While NIST can capture its costs, it faces challenges in directly comparing costs with results.
- ! As a central clearinghouse for the collection and dissemination of scientific, technical, and engineering information from domestic and international sources, NTIS contributes directly to the Department's strategic goal of providing U.S. industry and the nation with a world-class base of scientific and technical information. NTIS's performance measures, as stated in the overview to its fiscal year 1998 financial statements, are information products catalogued, indexed, archived, and stored electronically, as well as information on web-site accesses and customer complaints. NTIS needs to continue to explore alternative methods of measuring and reporting its performance.

FINANCIAL STATEMENT AUDITS

The Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994 were designed to improve the financial management practices of federal agencies. The acts required audited financial statements that present an entity's financial position and results of operations and provide other information needed for the Congress, agency executives, the public, and others to assess management's performance and stewardship. The Technology Administration received an unqualified opinion on its fiscal year 1995 statement of financial condition and unqualified opinions on all of its financial statements for fiscal years 1996 and 1997, with no material weaknesses or reportable conditions. While final audit results are not yet available, the Technology Administration also is expected to receive an unqualified opinion on its fiscal year 1998 financial statements.

NIST received unqualified opinions on its financial statements from fiscal year 1994 through fiscal year 1997. Draft audit results indicate that NIST will also receive an unqualified opinion on its fiscal year 1998 financial statements.

NTIS MISSION AND FINANCIAL STABILITY

In September 1998, we issued an audit report on NTIS's financial condition and ability to support its operations through fees. Although NTIS funds its operations from revenue earned through the sales of publications and services, it received modest annual appropriations from 1945, the year of its inception, through fiscal year 1987. More recently, NTIS received a \$7.8 million appropriation to reimburse customers' accounts and augment its working capital in fiscal year 1993, and \$7 million to modernize its computer systems in fiscal year 1995. We concluded that the agency's operations were jeopardized by declining sales for its clearinghouse products and services. We noted that NTIS's bibliographic and archiving services—its core mission functions—had incurred losses in two of the three past fiscal years and was operating at a loss in fiscal year 1998. We questioned whether the organization would have sufficient cash to cover its operations in fiscal year 1999 and beyond. We recommended that the Acting Under Secretary for Technology

commission an outside review of NTIS's operations for use in (1) developing a business plan that addresses its short- and long-term financial and business problems and (2) seeking relief from any of its legislative mandates, as appropriate.

NTIS's problems are not new. We issued our first audit report on NTIS's financial statements in September 1990, more than eight years ago. In that report, which addressed NTIS's fiscal year 1989 financial statements, we expressed serious concerns about the agency's financial stability and the viability of its current and future mission. We reported that NTIS suffered an operating loss of over \$674,000 in fiscal year 1989, after three years of declining profits.

Based on that earlier audit, we concluded that NTIS's weak financial position threatened its continued operations and recommended that no major investments in modernization or business expansion be made until an evaluation of the agency's existing operations—including the existing management structure and the feasibility of existing products and services—was completed. We cited an Office of Technology Assessment report and related congressional testimony which stated that NTIS was obtaining a smaller and smaller percentage of the technical documents produced by federal agencies, thereby jeopardizing the completeness of its document inventory and adversely affecting future sales.

In our work since then, we have continued to express concerns about NTIS's financial stability and the viability of its mission. Our March 1997 report on our program evaluation of NTIS, for example, found that while the agency was successfully managing most of its traditional mission activities, it appeared to be undertaking activities based on a very broad interpretation of its mission and authority. In March 1997, we issued a separate inspection report on one such activity, the \$20 million joint NTIS-Internal Revenue Service CyberFile project. We found that NTIS lacked the requisite in-house technical and management expertise to handle the project. NTIS's role in the project also was criticized by the General Accounting Office, the IRS internal audit office, and the Congress. We recommended that NTIS avoid taking on projects that are potentially outside its mission and capabilities. NTIS agreed to implement this recommendation.

In September 1997, we completed an analysis of NTIS's financial data for fiscal years 1991 through 1997. We concluded that the agency would not meet its mandate to be self-supporting unless revenues increased and/or operating costs decreased. We noted that NTIS suffered net losses of \$1.1 million in fiscal year 1995 and \$3.8 million in 1997 due to decreased sales and increased costs. An independent public accounting firm, in its final audit report on NTIS's fiscal year 1997 financial statements, indicated that NTIS would have sufficient reserves for fiscal year 1998, although it appeared that operating expenses would again exceed operating revenues.

In fact, NTIS subsequently reported a \$1.3 million loss in fiscal year 1998, and has reported a \$622,000 loss through the first three months of fiscal year 1999. While the independent accounting firm believes that NTIS will have sufficient cash flow to maintain operations through the end of fiscal year 1999, the continued losses associated with the declining demand for NTIS's products and services reinforces our call for the Technology Administration and the Department to thoroughly reassess NTIS's mission and future viability.

This completes my statement, Madame Chairwoman. I would be pleased to answer any questions you and other Members of the Committee may have.